



## HP xw4400 WORKSTATION

Extreme performance in a flexible entry workstation, at an affordable price.



The HP xw4400 Workstation was engineered to meet the ever-increasing computing demands of engineers, designers, video-editors, and power users. An excellent price/performance value, the HP xw4400 delivers significant performance gains while reducing typical power consumption. Featuring new Intel® Core™ microarchitecture which supports the powerful new Intel Core 2 Duo processors<sup>1</sup>, the ISV-certified HP xw4400 is available with a range of graphics, memory and storage choices. It is all delivered in a quiet, convertible, tool-less access chassis which is easy to use, service and upgrade.

If you require workstation performance at a low cost and are looking for flexible deployment, easy serviceability and award winning support, the HP xw4400 Workstation was engineered for you.

### Get cutting-edge technology at a PC-like price

The HP xw4400 delivers new third generation dual-core processors, providing significant performance boosts over previous generation single and dual-core processors. Support of the Extreme Edition version is also provided if you desire the fastest clock frequency available or Intel Quad-Core technology.<sup>1,2,3</sup>

Intel's 975X Express next generation, high-end performance chipset for Intel processors delivers fast, dual-channel DDR2 667 MHz memory, PCIe x16 graphics, integrated Serial ATA controller with RAID 0/1/5/10 capability.

### Advanced high-performance visualization

From professional 2D through high-end 3D graphics, the HP xw4400 has the graphics choice to deliver the visual accuracy and image clarity your job demands. Additionally, the HP xw4400 offers support for multi-display. A second NVIDIA NVS 285 PCIe graphics card enables inexpensive quad display while a second NVIDIA FX 1500 graphics card allows you to use 4 displays with mid-range 3D graphics on each.

### Easily convert, access, and service your workstation

The HP xw4400 features a versatile, convertible minitower chassis which allows you to use the workstation as a desktide solution on the floor or in a desktop configuration. The chassis is very easy to convert from one configuration to the other and the workstation can be ordered in either orientation. The HP xw4400's tool-less access chassis design is efficient, open, quiet, easy to maintain, service and upgrade.

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## HP recommends Windows Vista® Business

<b>Form factor</b>	Convertible minitower
<b>Operating systems</b>	Genuine Windows® XP Professional 32-bit Genuine Windows® XP Professional x64 Genuine Windows Vista® Business 32-bit Genuine Windows Vista® Business 64-bit Genuine Windows Vista® 32-bit downgrade to Genuine Microsoft® Windows® XP Professional 32-bit* Genuine Windows Vista® 64-bit downgrade to Genuine Microsoft® Windows® XP Professional x64* Enterprise Linux™ WS 4 64-bit HP Installer Kit for Linux (includes drivers for both 32-bit & 64-bit OS versions of Red Hat Enterprise Linux 3 and 4) Certified on Novell Linux Desktop 9 Red Flag Linux v5 (available in China only)
<b>Available processors</b>	Intel Pentium Dual-Core <sup>1</sup> Processor E2160 <sup>5</sup> /1.80 GHz <sup>6</sup> , 1 MB, 800 MHz FSB <sup>7</sup>  Intel Core™ 2 Duo Processor E4300 <sup>5</sup> /1.80 GHz <sup>6</sup> , 2 MB, 800 MHz FSB <sup>7</sup> Intel Core 2 Duo Processor E6300 <sup>5</sup> /1.86 GHz <sup>6</sup> , 2 MB, 1066 MHz FSB <sup>7</sup> Intel Core 2 Duo Processor E6320 <sup>5</sup> /1.86 GHz <sup>6</sup> , 4 MB, 1066 MHz FSB <sup>7</sup> Intel Core 2 Duo Processor E6400 <sup>5</sup> /2.13 GHz <sup>6</sup> , 2 MB, 1066 MHz FSB <sup>7</sup> Intel Core 2 Duo Processor E6420 <sup>5</sup> /2.13 GHz <sup>6</sup> , 4 MB, 1066 MHz FSB <sup>7</sup> Intel Core 2 Duo Processor E6600 <sup>5</sup> /2.40 GHz <sup>6</sup> , 4 MB, 1066 MHz FSB <sup>7</sup> Intel Core 2 Duo Processor E6700 <sup>5</sup> /2.67 GHz <sup>6</sup> , 4 MB, 1066 MHz FSB <sup>7</sup>  Intel Core 2 Extreme Processor <sup>1,2,3</sup> QX6700 <sup>5</sup> /Quad-Core <sup>1</sup> 2.66 GHz <sup>6</sup> , 2 x 4 MB, 1066 MHz FSB <sup>7</sup>
<b>Chipset</b>	Intel 975X Express
<b>Memory</b>	Up to 8 GB of DDR2-SD 667 MHz ECC unbuffered (8 GB max.) or non-ECC (2 GB max.) in 4 DIMM slots
<b>Drive controllers</b>	Integrated Serial-ATA (SATA) 3 Gb/s interface (4 SATA connectors), with RAID 0, 1, 5, and 10 capability <sup>8</sup> ; 1 EIDE interface (2 EIDE connectors) for optical drives; opt. LSI 3041E SAS controller with RAID 0, 1, 1E and 10E capability <sup>8</sup> ; LSI 8344ELP 8-port SAS HW RAID Card with RAID 5
<b>Hard drive(s)</b>	Up to 4 drives (2 will require optional expander kits), 3 TB max.; 80, 160 GB <sup>9</sup> (10K rpm) SATA 1.5 Gb/s; or 80 GB <sup>9</sup> (7200 rpm) SATA 3 Gb/s, 160, 250, 500, 750 GB <sup>9</sup> SATA 3 Gb/s NCQ; or 146, 300 GB <sup>9</sup> (10K rpm) SAS 3 Gb/s or 73, 146, 300 GB <sup>9</sup> (15K rpm) SAS 3 Gb/s
<b>Optical drives</b>	DVD-ROM, CD-RW/DVD combo, SATA CD-RW/DVD combo, DVD+/- RW Dual-Layer with LightScribe Direct Disc Labeling (Microsoft Windows only, requires LightScribe media for labeling) <sup>10</sup> , SATA DVD+/-RW SuperMulti with LightScribe Direct Disc Labeling (Microsoft Windows only, requires LightScribe media for labeling) <sup>10</sup>
<b>Drive bays</b>	3 external 5.25-inch bays, 2 internal 3.5-inch bays, 1 external 3.5-inch bay
<b>Slots</b>	6 full length slots: 1 PCI Express (PCIe) x16 graphics, 1 PCIe x16 (x4 electrical) slot, 1 PCIe x1 slot, 3 PCI slots
<b>Graphics</b>	Professional 2D: NVIDIA Quadro NVS 285 (128 MB, up to 2), NVIDIA Quadro NVS 440 (256 MB) – NVS 285 and NVS 440 can be mixed in a single system Entry 3D: NVIDIA Quadro FX 560 (128 MB, up to 2 cards), ATI FireGL V3350 (256 MB) Mid-range 3D: NVIDIA Quadro FX 1500 (256 MB, up to 2 cards), ATI FireGL V7200 (256 MB) High-end 3D: NVIDIA Quadro FX 3500 (256 MB), NVIDIA Quadro FX 4600 (768 MB)
<b>Audio</b>	Integrated High Definition audio with Jack Retasking capability, opt. PCI Sound Blaster X-Fi XtremeMusic (Windows XP Professional only)
<b>Network</b>	Integrated Broadcom 5755 NetXtreme Gigabit <sup>11</sup> PCIe, opt. Broadcom 5751 NetXtreme Gigabit <sup>11</sup> PCIe
<b>Ports</b>	Front: 2 USB 2.0, 1 headphone, 1 microphone, IEEE 1394A (optional) Rear: 5 USB 2.0, 1 standard serial port (opt. 2nd), 1 parallel, 2 PS/2, 1 RJ-45 to integrated Gigabit LAN, Audio In, Audio Out, microphone Internal: 1 USB 2.0 (requires optional "Internal USB Kit" for connecting USB device)
<b>Input devices</b>	PS/2 Scroll Mouse; USB Optical Scroll Mouse; USB 3-Button Optical Mouse; USB SpaceMouse; USB SpaceBall; USB SpacePilot
<b>Dimensions (H x W x D)</b>	17.3 in (44.1 cm) x 6.5 in (16.5 cm) x 17.4 in (44.3 cm)
<b>Power</b>	460 watts, active Power Factor Correction, optional 475-watt 80 PLUS power supply, optional ENERGY STAR® 4 configurations
<b>Monitors (diagonally measured)</b>	19-inch HP LP1965 Flat Panel Monitor, 20.1-inch HP LP2065 Flat Panel Monitor, 24-inch HP LP2465 Flat Panel Monitor, 30-inch HP LP3065 Flat Panel Monitor

**Warranty** Basic three years next business day, parts, labor, and 8x5 phone support; terms and conditions may vary, certain restrictions apply. Service levels and response times for HP Care Packs may vary depending on your geographic location. Restrictions and limitations apply. For details, visit [www.hp.com/go/carepack](http://www.hp.com/go/carepack).

Certain Windows Vista product features require advanced or additional hardware. See <http://www.microsoft.com/windowsvista/getready/hardwarereqs.msp> and <http://www.microsoft.com/windowsvista/getready/capable.msp> for details. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit <http://www.windowsvista.com/upgradedadvisor>. All HP Personal Workstations are capable of running Genuine Windows Vista Business.

<sup>1</sup> Quad-Core and Dual-Core are new technologies designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefits; check with software provider to determine suitability; Not all customers or software applications will necessarily benefit from use of these technologies.

<sup>2</sup> 64-bit computing on Intel architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See [www.intel.com/info/em64t](http://www.intel.com/info/em64t) for more information.

<sup>3</sup> This workstation does not support the Intel Core 2 Extreme processor over-clocking feature.

<sup>4</sup> Available for end user customers that are a business (including governmental or educational institutions) who are expected to annually order at least 25 Customer Systems with the same Custom Image.

<sup>5</sup> Intel's numbering is not a measurement of higher performance.

<sup>6</sup> GHz refers to internal clock speed of the processor. Other factors besides clock speed may impact system and application performance.

<sup>7</sup> Actual bus clock rate is less. Listed bus speed represents the effective data transfer rate.

<sup>8</sup> Hardware RAID is not supported on Linux systems. The Linux kernel, with built-in software RAID, provides excellent functionality and performance. It is a good alternative to hardware-based RAID. Please visit <http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf> for RAID capabilities with Linux.

<sup>9</sup> 1 GB = 1 billion bytes. Actual formatted capacity is less. Up to 8 GB of hard drive (or system disk) is reserved for the system recovery software (XP and XP Pro). Up to 12 GB of system disk is reserved for system recovery software. (Vista) Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copy-right protected materials. Intended for creation and storage of your original material and other lawful uses. Double layer discs can store more data than single layer discs. However, double-layer discs burned with this drive may not be compatible with many existing single-layer DVD drives and players. LightScribe creates a monochrome image. LightScribe media required and sold separately.

<sup>11</sup> The term "10/100/1000" or "Gigabit" Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

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For more information, visit [www.hp.com/go/workstations](http://www.hp.com/go/workstations)

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